

CLAIMS

(1) A maintenance mechanism for an ink jet printer for performing capping operation and wiping operation on a printhead of an ink cartridge mounted on a carriage which moves back and forth along a main scanning direction, said maintenance mechanism comprising:

a base member fixed to an apparatus body;

a slide member held by said base member slidably along the main scanning direction;

slide biasing means for causing said slide member to return back to a specified position of the base member while causing said slide member to slide;

a cap and a wiper fixed to said slide member;

a claw member swingably supported on said base member for locking said slide member onto said base member during the wiping operation performed by said wiper;

a claw biasing member for biasing said claw member in a direction of locking;

a claw push-down projecting part provided on said slide member for forcing said claw member downward in contact with said claw member; and

an unlocking protruding part provided at the bottom of said carriage, in which said unlocking protruding part comes into contact with said claw member as a result of a movement of said carriage at the beginning of a printing

process upon completion of the wiping operation and causes said claw member to release said slide member from a locked state so that said slide member returns back to the specified position of the base member;

5 wherein said maintenance mechanism is configured in such a manner that said claw push-down projecting part comes into contact with said claw member due to returning motion of said slide member and forces said claw member down to a position lower than said unlocking protruding
10 part to avoid mutual interference between said claw member and said carriage.

(2) A maintenance mechanism for an ink jet printer as recited in claim 1, wherein the position of said claw
15 member during said printing process is set lower than a sheet surface.

(3) A maintenance mechanism for an ink jet printer as recited in claim 1, further comprising a damper for
20 preventing an inertial force of said slide member caused by the returning motion thereof back to said specified position from being transmitted directly to said base member and the apparatus body.

25 (4) A maintenance mechanism for an ink jet printer as

recited in claim 3, wherein said slide member is provided with a fixing part to which said wiper and said damper are integrally fixed.

5 (5) A maintenance mechanism for an ink jet printer as recited in claim 4, wherein said damper is made of a compression spring having a shape which makes it possible to fix said damper to said fixing part.

10 (6) A maintenance mechanism for an ink jet printer as recited in claim 5, wherein said wiper is made of an elastic member having a shape which makes it possible to fix said wiper after said damper has been fixed to said fixing part.

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